

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method ~~for provisioning a user interface~~ comprising:
receiving by a client device, from a remote server, a plurality of display state definitions
correspondingly defining a plurality of instantiations of an user interface of an application for a
plurality of corresponding display states of the user interface, each display state definition
defining an instantiation of the user interface for a display state of the user interface;
determining locally by ~~thea~~ client device, a current display state of ~~thea~~ user interface;
and
provisioning by the client device, a current instantiation of said user interface in
accordance with a first of the display state definitions corresponding to the determined current
display state, ~~said first display state definition including first one or more display cell definitions~~
~~for first one or more display cells of said user interface, while said user interface in said current~~
~~display state.~~
2. (Currently amended) The method of claim 1, wherein each display state definition has
one ore more display cell definitions correspondingly defining one or more display cells of a
corresponding instantiation of the user interface, and said determining is locally made by said
client device in accordance with a ~~second~~ display cell definition of a second of the display state
definitions ~~of the user interface for a second rendered display cell of an immediately preceding~~
~~instantiation of the user interface for~~ corresponding to an immediately preceding display state of
an immediately preceding instantiation of the user interface, with which corresponding display
cell a user interacted, ~~said-second~~ display cell definition including a state transition rule

specifying the current display state as the display state of the user interface in the event a user interacts with the corresponding~~second~~ rendered display cell.

3. (Currently amended) The method of claim 2~~1~~, wherein said provisioning comprises generating by said client device ~~at least a first portion~~ display cell of the current instantiation of the user interface in accordance with ~~one a first~~ of said ~~first one or more display cell definitions of said first display state definition~~ for one of said first one or more display cells of the user interface.

4. (Currently amended) The method of claim 3, wherein said provisioning further comprises generating by said client device a second display cell~~portion~~ of the current instantiation of the user interface in accordance with ~~another one a second~~ of said ~~first one or more display cell definitions of said first display state definition~~ for another one of said first one or more display cells of the user interface.

5. (Previously Presented) The method of claim 1, wherein said provisioning comprises generating by said client device a portion of the current instantiation of the user interface with constituting contents inherited from a pseudo instantiation of the user interface.

6. (Previously Presented) The method of claim 1, wherein said current display state is multi-dimensional.

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Currently Amended) A method ~~for provisioning a user interface~~ comprising:
provisioning locally by a client device a first instantiation of a user interface of an application for a current display state of the user interface in accordance with a first display state definition defining the first instantiation of the user interface for ~~corresponding to a said~~ current display state of the user interface;

determining locally by said client device a next display state for the user interface based on a user's interaction with a display cell~~portion~~ of the first instantiation of the user interface,

and in accordance with a corresponding display cell definition of said first display state definition defining the display cell, the display cell definition including at least one state transition rules correspondingly specifying a next display states of the user interface to be transitioned to, for anvarious user interactions with various portionsthe display cell of the user interface; and

provisioning by the client device a next instantiation of the user interface corresponding to the determined next display state of the user interface, in accordance with a second display state definition, separate and distinct from said first display state definition, defining the next instantiation of the user interface ~~corresponding to the determined next display state of the user interface.~~

11. (Currently Amended) A method ~~for provisioning a user interface~~ comprising:

transmitting by a server to a remote client device, a first display state definition defining a corresponding first instantiation of the a user interface of an application for-to a first display state of the user interface, specifying first constituting contents for a first plurality of display cells ~~offer the first instantiation of the user interface for the first display state of the user interface;~~

transmitting by the server to said remote client device, said first constituting contents for said first plurality of display cells for rendering said first instantiation of said user interface on said remote client device in accordance with said first display state definition ~~corresponding to the first display state of the user interface;~~

transmitting further in advance by the server to said remote client device, a second display state definition, separate and distinct from said first display state definition, defining a corresponding second instantiation of the user interface for-to a second display state of the user interface, specifying second constituting contents for a second plurality of display cells for the second instantiation of the user interface ~~for the second display state, the second display state being resulted from a first user interaction with said first instantiation of the user interface for the first display state; and~~

transmitting further in advance by the server to said remote client device, said second constituting contents for said second plurality of display cells for rendering said second instantiation of said user interface on said remote client device in accordance with said second display state definition ~~corresponding to the second display state of the user interface.~~

12. (Currently amended) The method of claim 11, wherein the method further comprising: transmitting by the server to said remote client device, third constituting content of a pseudo instantiation of said user interface to be inherited during at least a selected one of said rendering, in accordance with a corresponding one of said first and second display state definitions ~~corresponding to said first and second display states of said user interface.~~

13. (Currently amended) The method of claim 11, wherein said first and second display state definitions correspondingly comprise first and second plurality of display cell definitions correspondingly specifying the first and second constituting contents for said first and second plurality of display cells for said first and second ~~display states~~instantiations of the user interface.

14. (Currently Amended) The method of claim 13, wherein said first and second display cell definitions further corresponding comprises first and second plurality of display state transition rules correspondingly specifying display states of the user interface, to be transitioned to in the event of various user interactions with the corresponding first and second display cells at the respective first and second display states of the user interface.

15. (Currently Amended) A product comprising:
a first plurality of programming instructions to implement a user interface provision function equipped to determine a current display state for a user interface of an application, and to provision a current instantiation of said user interface in accordance with a first of a plurality display state definitions correspondingly defining a first of a plurality of instantiations of the user interface corresponding to the determined current display state, to determine a next display state for the user interface in accordance with an user interaction with the current instantiation of the user interface and a first state transition rule of the first display state definition, and to provision a next instantiation of said user interface in accordance with a second of the plurality display

state definitions, separate and distinct from the first display state definition, correspondingly defining a second of the plurality of instantiations of the user interface corresponding to the determined next display state~~the first said display state definition including first one or more display cell definitions for first one or more display cells of said user interface while in said current display state; and~~

a second plurality of programming instructions implementing at least one other product function.

16. (Cancelled)

17. (Currently amended) The product of claim 15, wherein said first display state definition has a plurality of display cell definitions correspondingly defining a plurality of display cells of the current instantiation of the user interface, and said first programming instructions further equip said user interface provision function to perform said provisioning of the current instantiation of the user interface, by generating ~~at least~~ a first display cell ~~portion~~ of the current instantiation of the user interface in accordance with a first one of said first display cell definitions ~~for one of said first display cells of the user interface.~~

18. (Currently amended) The product of claim 17, wherein said first programming instructions further equip said user interface provision function to perform said provisioning of the current instantiation of the user interface, by generating a second display cell ~~portion~~ of the current instantiation of the user interface in accordance with ~~another one of~~ a second of said first display cell definitions ~~for another one of said first display cells of the user interface.~~

19. (Currently amended) The product of claim 15, wherein said first programming instructions equip said user interface provision function to perform said provisioning of the current instantiation of the user interface, by generating a portion of the current instantiation of the user interface with constituting contents inherited from a pseudo instantiation of the user interface.

20. (Previously Presented) The product of claim 15, wherein said current display state is multi-dimensional.

21. (Original) The product of claim 15, wherein the product is a selected one of a browser and an operating system.

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Currently Amended) A product comprising:

a first plurality of programming instructions to implement a user interface provision function equipped to provision a first instantiation of a user interface of an application in accordance with a first display state definition defining a first instantiation of the user interface corresponding to a current display state of the user interface, to determine a next display state of the user interface based on a user's interaction with a portion of the first instantiation of the user interface and in accordance with said first display state definition, which include state transition rules specifying display states to be transitioned to, in the event of various user interactions, and to provision a next instantiation of the user interface in accordance with a second display state definition, separate and distinct from the first display state definition, defining the next instantiation of the user interface corresponding to ~~for the determined~~ next display state of the user interface; and

a second plurality of programming instructions to implement at least one other product function.

26. (Currently amended) An application server comprising:

~~a first plurality of programming instructions to implement a communication function; and~~
a ~~second~~ plurality of programming instructions to implement a user interface provision function equipped to transmit to a remote client device, a first display state definition specifying constituting contents for a first plurality of display cells of a first instantiation of an user interface of an application corresponding to ~~for~~ a first display state of the user interface, and first constituting contents for said first plurality of display cells for rendering said first instantiation of the user interface on said remote client device in accordance with said first display state

definition, and to transmit further in advance to said remote client device, a second display state definition, separate and distinct from the first display state definition, specifying second constituting contents for a second plurality of display cells of a second instantiation of ~~the~~^a user interface ~~for~~^{corresponding to} a second display state of the user interface, to be rendered in response to a ~~first~~ user interaction with said first instantiation of the user interface, and said constituting contents for said second plurality of display cells for rendering said second instantiation of the user on said remote client device in accordance with said second display state definition in the event said first user interaction occurs.

27. (Currently amended) The application server of claim 26, wherein the ~~second~~ plurality of programming instructions further equip the user interface provision function to be able to transmit to said remote client device, constituting content of a pseudo instantiation of said user interface to be inherited in at least a selected one of said rendering of said first and said second instantiation of said user interface.

28. (Currently amended) The application server of claim 26, wherein said first and second ~~one or more~~ display state definitions correspondingly comprise ~~corresponding~~ first and second plurality of display cell definitions correspondingly specifying the first and second constituting contents for said first and second plurality of display cells.

29. (Currently amended) The application server of claim 28, wherein said first and second display cell definitions further correspondingly comprise ~~corresponding~~ first and second plurality of display state transition rules correspondingly specifying display states of the user interface to be transitioned to in the event of various corresponding user interactions with the first and second display cells.

30. (Currently amended) A client device comprising:

a storage medium having stored therein a plurality of programming instructions to implement a user interface provision function equipped to receive from a remote server a plurality of display state definitions correspondingly defining a plurality of instantiations of an user interface of an application corresponding to a plurality of display states of the user interface,

determine a current display state of ~~the~~ a user interface, and to provision a current instantiation of said user interface in accordance with a first of said display state definitions corresponding to ~~for~~ the determined current display state of the user interface, ~~said first display state definition including one or more display cell definitions for one or more display cells of said user interface, while the user interface in said display state;~~ and

a processor coupled to the storage medium to execute the programming instructions.

31. (Currently amended) The client device of claim 30, wherein each of said plurality of display state definitions comprises a plurality of display cell definitions correspondingly defining a plurality of display cells of the corresponding instantiation of the user interface, and said programming instructions further equip said user interface provision function to make said determination in accordance with ~~a first display cell definition~~ offer a first rendered display cell of an immediately preceding instantiation of the user interface with which a user interacted, said ~~first display cell definition~~ including a state transition rule specifying transition to the current display state of the user interface in the event a user interacts with the ~~first rendered display cell~~.

32. (Currently amended) The client device of claim 30, wherein said programming instructions further equip said user interface provision function to perform said provisioning of the current instantiation of the user interface, by generating ~~at least a first display cell~~ portion of the current instantiation of the user interface in accordance with a first display cell definition ~~for defining the~~ a first display cell of the user interface, the first display cell definition ~~including specifying~~ constituting contents of said first display cell ~~of the user interface, while the user interface in said current display state.~~

33. (Currently amended) The client device of claim 32, wherein said programming instructions further equip said user interface provision function to perform said provisioning of the current instantiation of the user interface, by generating a second display cell ~~portion of~~ the current instantiation of the user interface in accordance with a second display cell definition defining the ~~for a~~ second display cell of the user interface, the second display cell definition

~~including specifying~~ constituting contents of said second display cell ~~of the user interface, while the user interface in said current display state.~~

34. (Currently amended) The client device of claim 30, wherein said programming instructions equip said user interface provision function to perform said provisioning of the current instantiation of the user interface, by generating a portion of the current instantiation of the user interface with constituting contents inherited from a pseudo instantiation of the user interface.

35. (Previously Presented) The client device of claim 30, wherein said current display state is multi-dimensional.

36. (Previously Presented) The client device of claim 30, wherein the client device is a device selected from a group consisting of a wireless telephone, a palm sized computing device, and a notebook sized computing device.

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)

40. (Currently amended) A client device comprising:

a storage medium having stored therein a plurality of programming instructions to implement a user interface provision function equipped to provision a first instantiation of a user interface corresponding to a first display state in accordance with a first display state definition defining the first instantiation of a user interface, to determine a next display state of the user interface based on a user's interaction with a portion of the first instantiation of the user interface and in accordance with said first display state definition, which includes state transition rules specifying display states of the user interface to be transitioned to, in the event of various corresponding user interactions, and to provision a next instantiation of the user interface corresponding to the next display state in accordance with a second display state definition, separate and distinct from said first display state definition, defining the second instantiation for the determined next display state of the user interface; and

a processor coupled to the storage medium to execute the programming instructions.

41. (Currently amended) A server comprising:

a storage medium having stored therein a plurality of programming instructions to implement a user interface provision function equipped to transmit to a remote client device, a first display state definition specifying first constituting contents for a first plurality of display cells of a first instantiation of a user interface; while the user interface in a first display state, and first constituting contents for said first plurality of display cells for rendering said first instantiation of the user interface on said remote client device in accordance with said first display state definition, and to transmit further in advance to said remote client device, a second display state definitions, separate and distinct from said first display state definition, specifying second constituting contents for a second plurality of display cells of a second instantiation of thea user interface corresponding to a second display state of the user interface to be rendered in response to a first user interaction with said first instantiation of the user interface; leading to thea second display state of the user interface, and said second constituting contents for said second plurality of display cells for rendering said second instantiation of the user interface on said remote client device in accordance with said second display state definition in the event said first user interaction occurs; and

at least one processor coupled to the storage medium to execute the programming instructions.

42. (Previously Presented) The server of claim 41, wherein the plurality of programming instructions further equip the user interface provision function to transmit to said remote client device, constituting content of a pseudo instantiation of said user interface to be inherited in at least a selected one of said rendering of said first and said second instantiations of said user interface.

43. (Currently amended) The server of claim 41, wherein said first and second one or more display state definitions correspondingly comprise ~~corresponding~~ first and second plurality of

display cell definitions correspondingly specifying the first and second constituting contents for said first and second plurality of display cells.

44. (Currently amended) The server of claim 43, wherein said first and second display cell definitions further correspondingly comprise ~~corresponding~~ first and second plurality of display state transition rules correspondingly specifying display states of the user interface to be transitioned to in the event of corresponding user interactions with the first and second display cells.